

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS**

INSITUFORM TECHNOLOGIES, INC.,)	
)	
Plaintiff,)	
)	
v.)	Case No. 04 10487 GAO
)	
AMERICAN HOME ASSURANCE COMPANY,)	
)	
Defendant.)	

AFFIDAVIT OF THOMAS PORZIO

I, Thomas Porzio, being duly sworn do hereby depose and state:

1. I was the site manager for Insituform Technologies, Inc. for the installation, remediation, removal and replacement of the cured in place pipe ("CIPP") for Contract No. 6840. The following is based on personal knowledge and is true and correct to the best of my understanding. If called as a witness in this case, sworn under oath and subject to the penalty of perjury, I would testify as follows:

2. Insituform was subcontracted by D'Alessandro Corp. to rehabilitate approximately 5,400 feet of brick sewer owned by the Massachusetts Water Resources Authority (the "MWRA").

3. The MWRA host pipe was unusual in that it was an inverted egg-shape with the larger radius at the bottom and the radius at the top, and it was located about 20 to 30 feet below ground level with substantial ground water pressure and infiltration.

4. MWRA's engineer, Jacobs Civil Engineering ("Jacobs"), specified certain design and materials criteria for the CIPP. The design was based on a circular pipe with an equivalent

diameter of approximately 39 inches. Insituform initially submitted a proposal to D'Allessandro Corp. suggesting a thicker design based on a noncircular design assumption. Additionally, Insituform suggested a resin that differed from the specified materials in that it had higher design values (i.e., is stronger) and better cure properties in the presence of groundwater. As the proposed design method and materials were not accepted by Jacobs, Insituform submitted a proposal for the installation that incorporated the design criteria specified by Jacobs. Ultimately, Jacobs approved Insituform's submission.

5. The installation of the CIPP began on August 13, 2003 and was completed on September 8, 2003.

6. Visual inspections of the installation revealed fins or wrinkles protruding toward the center of the pipe. The fins or wrinkles were intermittent, generally running in the longitudinal direction, and appeared in every quadrant of the geometry. Insituform trimmed the fins or wrinkles at the direction of Jacobs after indicating a concern about compromising the integrity of the laminate with regard to leakage.

7. On October 31, 2003, the MWRA notified Insituform that the installation failed to meet the contract specifications and that the job was rejected due to leakage and that remediation was necessary.

8. Insituform tried various remedies to remediate the defects of the installation, including remedies such as testing of materials and repairing areas where samples were removed; grouting the annulus; proposal (and rejection by Jacobs) of epoxy repairs; proposal (and rejection by Jacobs) of spray-applied polyurethane.

9. Notwithstanding the efforts to remediate the defects, the pipe continued to leak due mainly to the larger-than-expected annulus. The size of the annulus also caused other concerns about the integrity of the pipe to be raised.

10. The pipe showed leakage through the liner at the trimmed fins as well as other areas.

11. Attempts at remedying the installation failed. MWRA insisted that 4,500 feet of the 5,400 feet of pipe installed by Insituform be removed and replaced.

12. An independent engineering firm, Haley & Aldrich, was retained to evaluate the original installation in light of the contractual specifications and to analyze the repair requirements, submittals and processes.

13. Plans were made to remove and replace the 4,500 feet of the installation (Phase 1"), which began on October 3, 2003. The Phase 1 removal and reinstallation was completed in May 2004. The inspection and testing of the Phase 1 reinstallation was completed May 8, 2004.

14. During the first quarter of 2005, the entire installation was inspected. It was then determined that the segment of the pipe that was not removed and replace in Phase 1 was also damaged. In fact, the pipe had buckled in at least two locations and was leaking at other locations.

15. The MWRA rejected the remaining 900 feet of the original installation and demanded that it be removed and replaced ("Phase 2").

16. Phase 2 removal and replacement took place from June through September of 2005.

17. Based on Insituform's investigation and analysis in conjunction with my own observations and participation in the entire process, the buckles in the original installation were caused by using the wrong design thickness and by using a resin material with lower physical and other properties for the installation conditions and environment. The fins, wrinkles, and leaks resulted from a design and fabrication of a liner for a circular pipe, not the inverted egg shape involved.

Signed under the pains and penalties of perjury this 7th day of September 2006.

By: s/Thomas Porzio
Thomas Porzio

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